# PROJECT DESCRIPTION

#### GENERAL

This project involves the modification of an existing mast arm Traffic Control Signal with street lighting and interconnect at the intersection of MD 704 (Martin Luther King Hwy) and Barlowe Rd / Hubbard Rd in Prince George's County. An Exclusive/Permissive left turn phase with video detection shall be added for the westbound approach of MD 704 (Martin Luther King Hwy). All traffic signal heads shall be replaced with LED signal heads. All existing video detection cameras shall be upgraded to current SHA standards. MD 704 (Martin Luther King Hwy) is assumed to run an east-west direction.

#### II. INTERSECTION OPERATION

- The intersection is to operate in a NEMA six-phase, fully-actuated mode, with the MD 704 (Martin Luther King Hwy) approaches continuing to run concurrently. The Exclusive/Permissive left turn phase for the eastbound approach of MD 704 (Martin Luther King Hwy) shall remain in operation. A new Exclusive/Permissive left turn phase for the westbound approach of MD 704 (Martin Luther King Hwy) shall be provided. The Countdown pedestrian phases with audible pushbutton actuation across both legs of MD 704 (Martin Luther King Hwy) shall remain in operation. The Countdown pedestrian phases with audible remain in operation. The Countdown pedestrian phases with audible pushbuttons across Barlowe Rd / Hubbard Rd shall remain on recall. The Barlowe Rd / Hubbard Rd approaches shall also continue to run concurrently.
- The existing full-traffic-actuated, eight-phase controller with video interface, 2-wire control unit and all necessary equipment housed in a NEMA size "6" base-mounted cabinet shall be utilized at this intersection. SHA Forces shall replace the existing Autoscope interface with Terra video interface.

#### III. SPECIAL NOTES

- 1. The Contractor shall be responsible for terminating all signal cables, to the appropriate terminals and shall properly label each cable.
- 2. All controller cabinet wiring will be performed by the S.H.A. Signal Shop Contact Mr. Ed Rodenhizer at (410) 787-7652 seventy-two hours in advance of intended work.
- 3. All underground and overhead utilities shown on these plans are schematic only and may not be complete. The Contractor shall be responsible for notifying Miss Utility prior to construction so that all utilities may be located in the field. If the Contractor perceives that a conflict between the utilities and the traffic signal will occur, the Contractor shall notify the Project Engineer immediately so that the conflict may be resolved.

The contact persons for District #3 (Prince George's County) and SHA are as follows:

Assistant District Engineer - Traffic Phone: (301) 513-7424

Mr. Vernon Stinnett District Engineer - Maintenance Phone: (301) 513-7304

Mr. Victor Grafton Assistant District Engineer – Utility Phone: (301) 513–7350

Mr. Richard L. Daff, Sr. Chief, Traffic Operations Division Phone: (410) 787–7630

Mr. Ed Rodenhizer Manager, Signal Operations Section 410–787–7652

#### EQUIPMENT LIST

EQUIPMENT TO BE SUPPLIED BY S.H.A..

ITEM NO.

DESCRIPTION

QUANTITY

Video detection interface

equipment: 1-4 cameras (To be installed by signal shop).

1 EA

#### EQUIPMENT LIST (CONT.)

В.	EQUIPMENT TO BE FURNISHED AND I	NSTALLED	BY THE	CONTRACTOR
ITEM NO.	DESCRIPTION	QUANT	TTY	
1001	Maintenance of traffic per assignment.	1	EA	
8000	Video detection camera & cable	4	EA	
8001	12" LED signal head section.	38	EA	
8003	8" LED signal head section.	6	EA	
8008	Remove and dispose of material equipment (per assignment)	& 1	EA	
8020	Electrical cable – 7 conductor (No. 14 AWG).	315	L.F.	

### EQUIPMENT TO BE REMOVED

All removed signal materials are to become property of the contractor.

PHASE 2 & 5 DW DW 2 & 5 CHANGE DW **| ←**Y−/G | **←**Y−/G | PHASE 2 & 6 DW PED CLEAR / COUNTDOWN 2 & 6 CHANGE DW DW DW DW DW DW DW PHASE 4 & 8 DW DW DW DW 4 & 8 CHANGE DW DW D₩ PHASE 4 & 8 ALT PED CLEAR / COUNTDOWN DW | FL/DW | FL/DW | FL/DW | FL/DW D₩

FL/Y | FL/Y | FL/Y | FL/R | FL/R | FL/R | FL/R | FL/R | DARK

PHASE CHART

WIRING DIAGRAM

FL/Y

**4**-G-/R | **4**-G-/R | R

**←**G-/G | **←**G-/G |

**←**Y-/G **←**Y-/G

CHANGES TO PHASES 1 & 6, 2 & 5 OR 2 & 6

PHASE 1 & 5

PHASE 1 & 6

1 & 6 CHANGE

4 & 8 ALT CHANGE

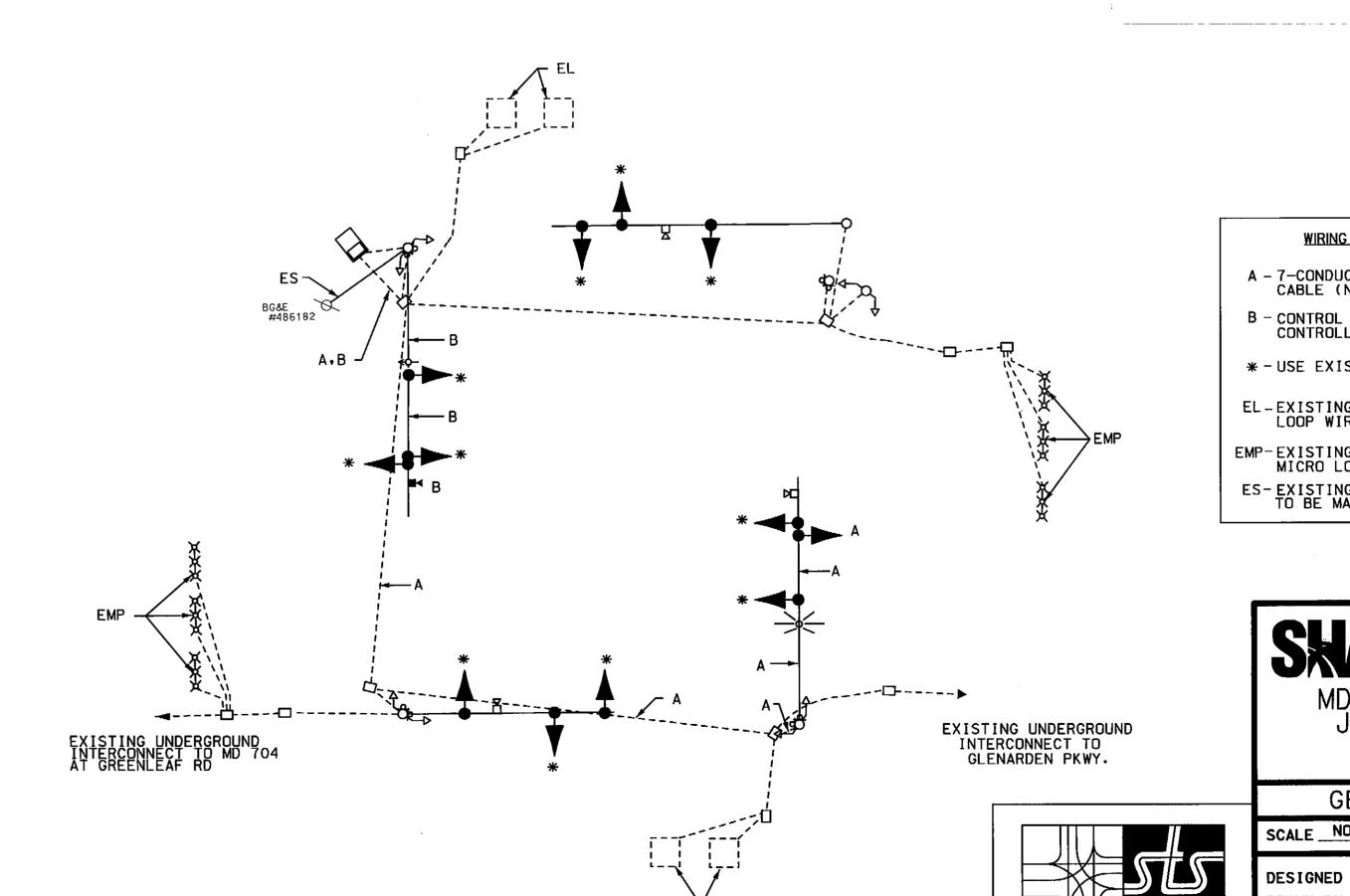
PRE EMPT 1 CHANGE

PRE EMPT 1

FLASHING

OPERATION

TOD NO: XX339-08 SHA NO: PG713A52/B52 MD 704 @ Barlowe Rd/Hubbard Rd



## WIRING KEY

- A 7-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G )
- B CONTROL CABLE (CAMERA TO CONTROLLER) UP TO 500'

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- \* USE EXISTING CABLE
- EL-EXISTING LOOP WIRE (NO. 14 A.W.G.)
- EMP-EXISTING MICRO LOOP WIRE
- ES-EXISTING OVERHEAD SERVICE TO BE MAINTAINED BY BGE

STATE OF MARYLAND DEPARTMENT OF TRANSPORTATION STATE HIGHWAY ADMINISTRATION

704 (MARTIN LUTHER KING HIGHWAY) AND BARLOWE ROAD/ HUBBARD ROAD GLEN ARDEN, MARYLAND

GENERAL INFORMATION SHEET

CONTRACT NO.XX3395185 SCALE NONE DATE 5/2/11 COUNTY \_\_PRINCE GEORGE'S DESIGNED BY J.W.A. LOGMILE 16070403.31 R.C. DRAWN BY\_ CHECKED BY 5/11 TIMS NO. \_ K661 TOD NO. A.P. NO. TS NO. 3203D DRAWING NO. 2 OF 2

SHEET NO.

5962GI.DGN

STREET TRAFFIC STUDIES, LTD. 400 Crain Hwy, N.W. Glan Burnia, MD 21061

PLOTTED: \$DATETIME\$ FILE: \$FILE\$